



Land Attack Warfare

Power Projection Panel

**NDIA
Expeditionary Warfare
Conference
25 October 00**

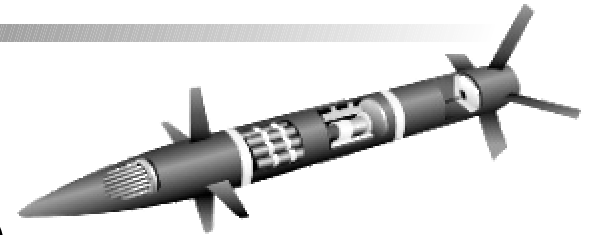
**CAPT Brian Schires
OPNAV N764**



NSFS Programs

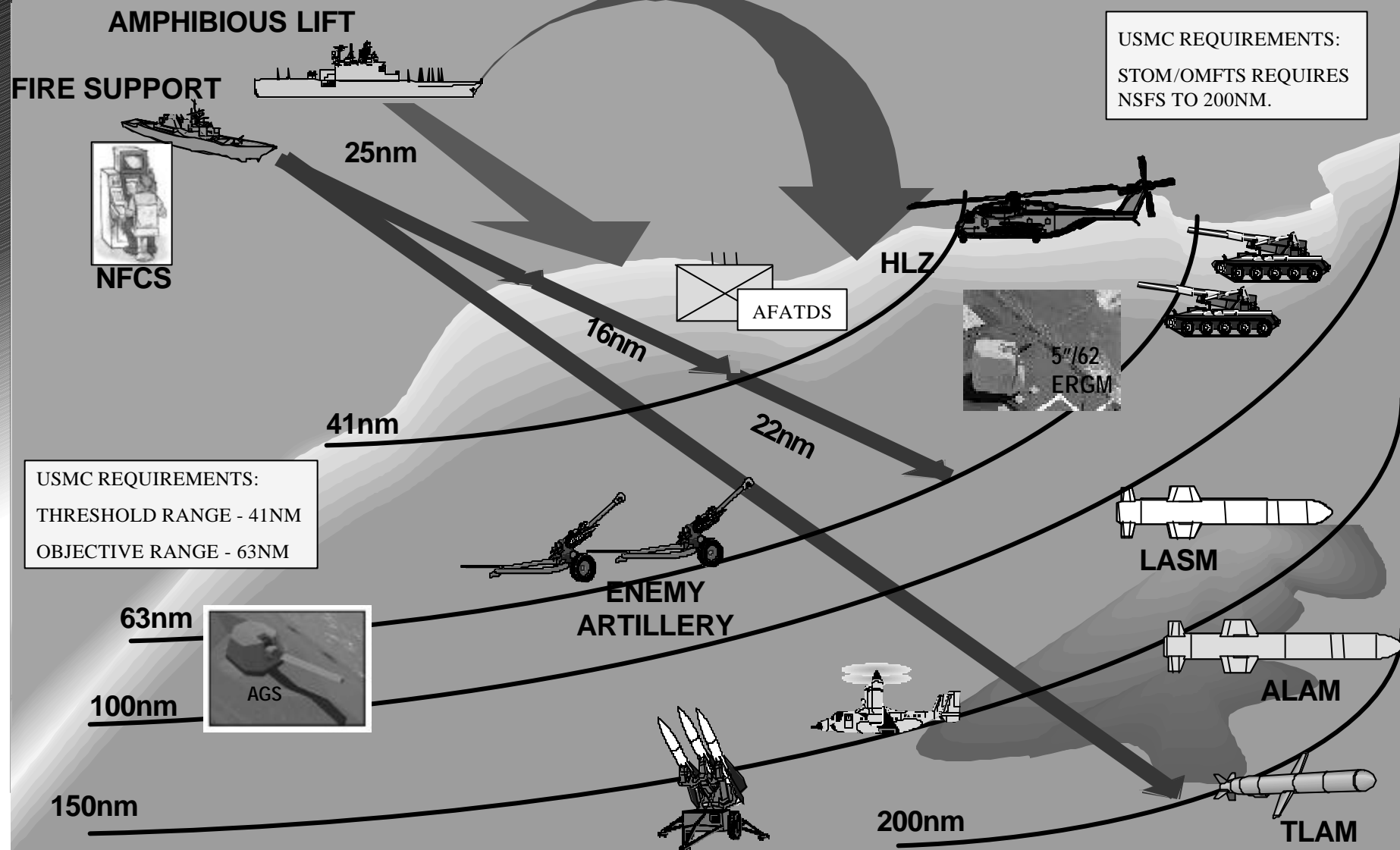


- 5"/62 Gun Weapon System
- Extended Guided Round Mmunition (ERGM)
- Land Attack Standard Missile (LASM)
- Tactical Tomahawk (TACTOM)
- Naval Fires Control System (NFCS)
- Common Land Attack Warfare System (CLAWS)
- ZUMWALT Class (DD 21)
- Advanced Land Attack Missile (ALAM)
- Advanced Gun System



NSFS Requirements

Plus: Responsiveness, Accuracy, and Volume



Meeting The Requirements



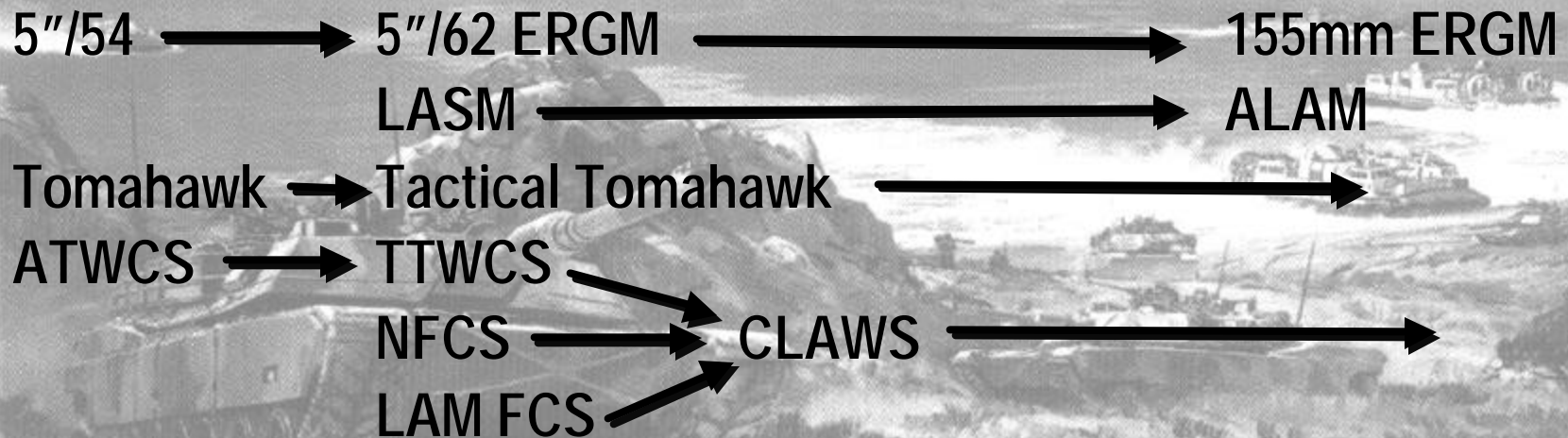
DDG 51



Cruiser Conversion



DD 21



NEAR TERM

FAR TERM

00

02

04

06

08

10

12

The Challenge



- Stove-Piped System Development
- Multiple PEOs and PMs
- Unsynchronized program development, duplication of effort, and unnecessary cost



The Solution



- Surface Combatant Land Attack Warfare Capstone Organization
- Memorandum of Agreement Signed 18 May 2000 by: N76, N75, PEO(S), PEO(TSC), PEO (W), PEO(EXW), DIR OPSDIV PPO HQMC, ASN(RD&A) CHENG



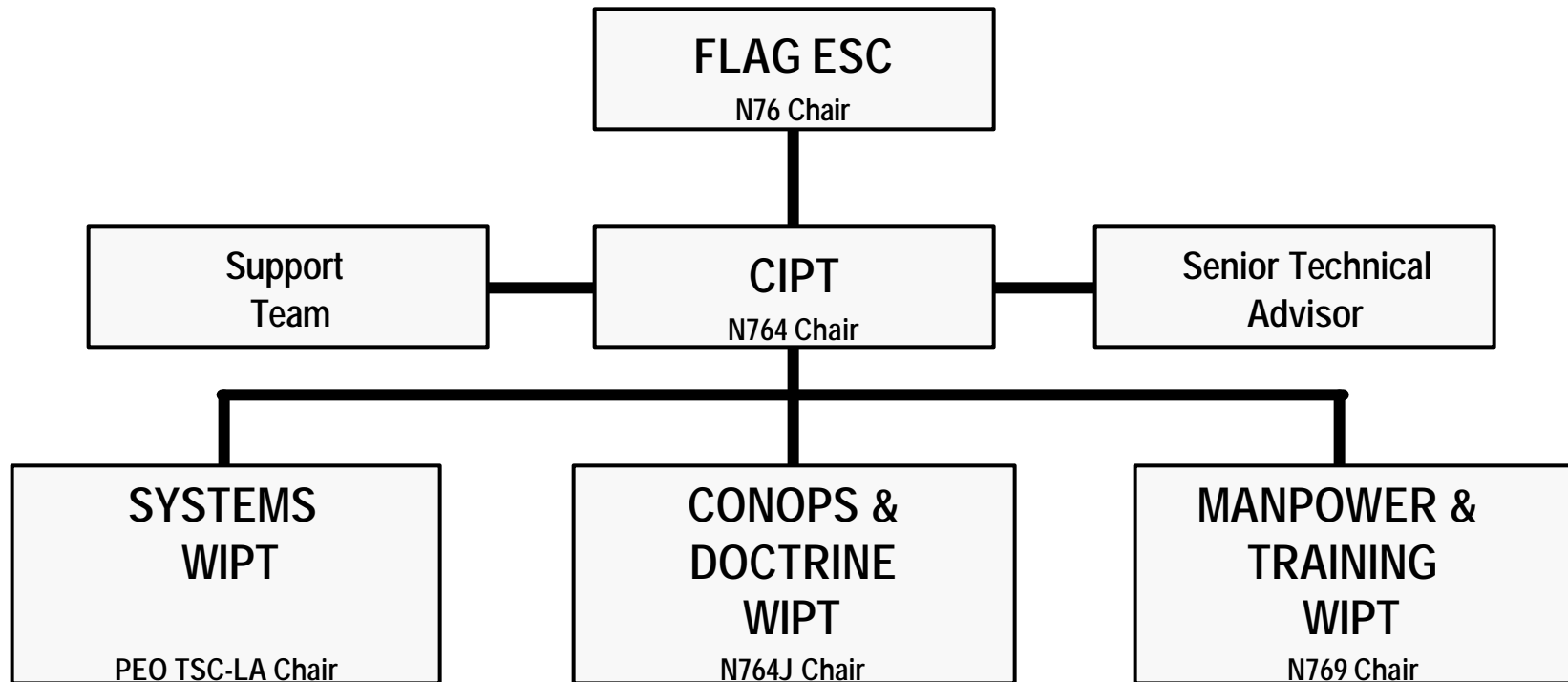
The Goal



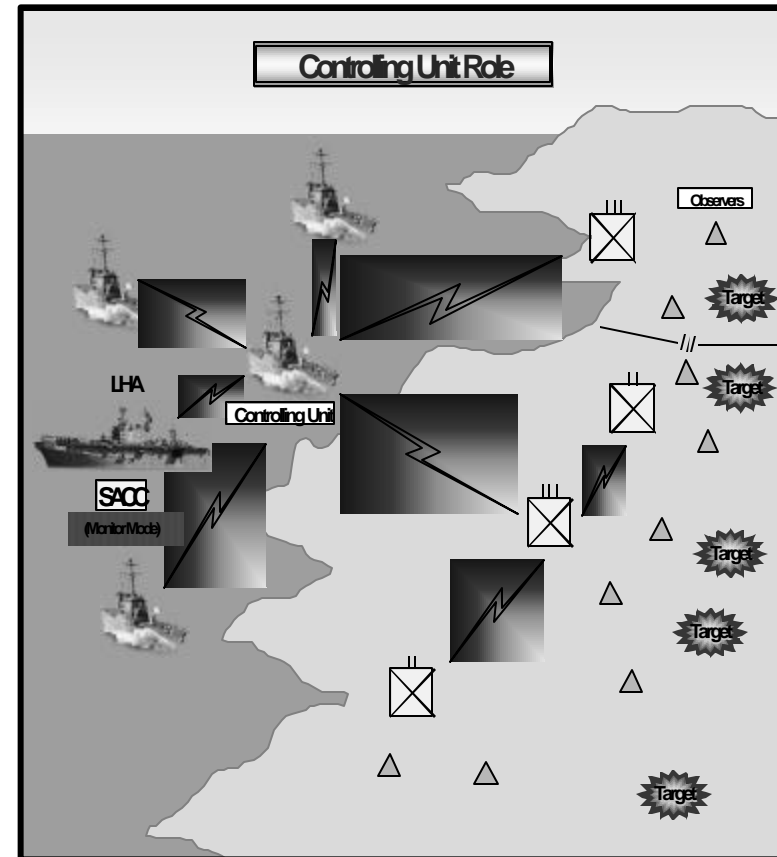
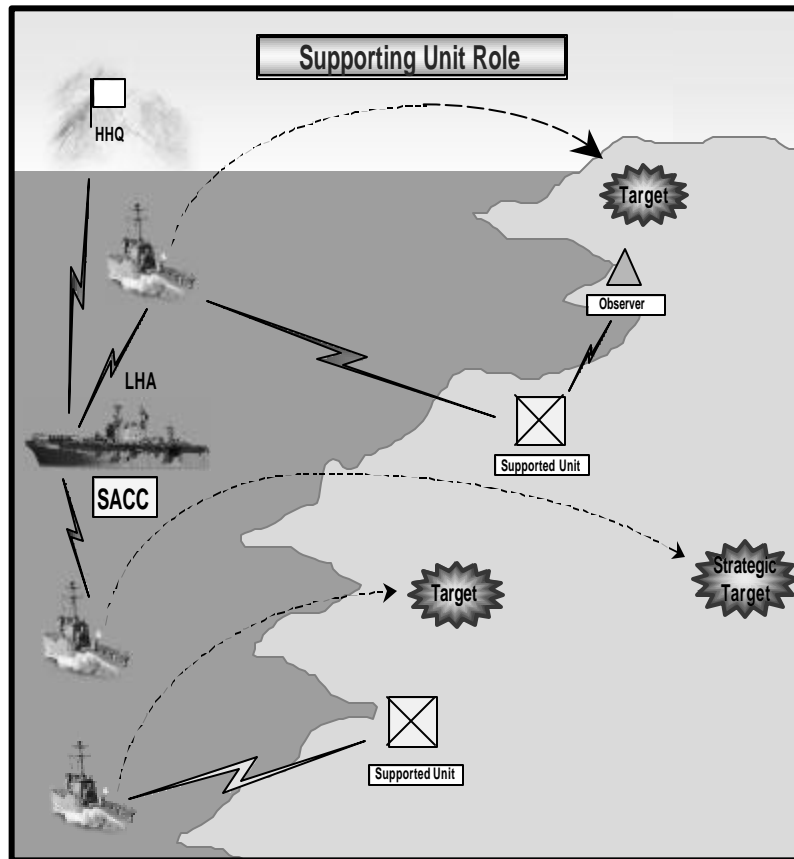
- To provide the Surface Combatant fleet with the most capable land attack warfare systems;
- To optimize manning and training requirements;
- To reduce development and life cycle costs;
- To synchronize requirements and programs;
- To eliminate unnecessary duplication; and
- To make the most effective use of existing and future resources.



The Capstone Organization



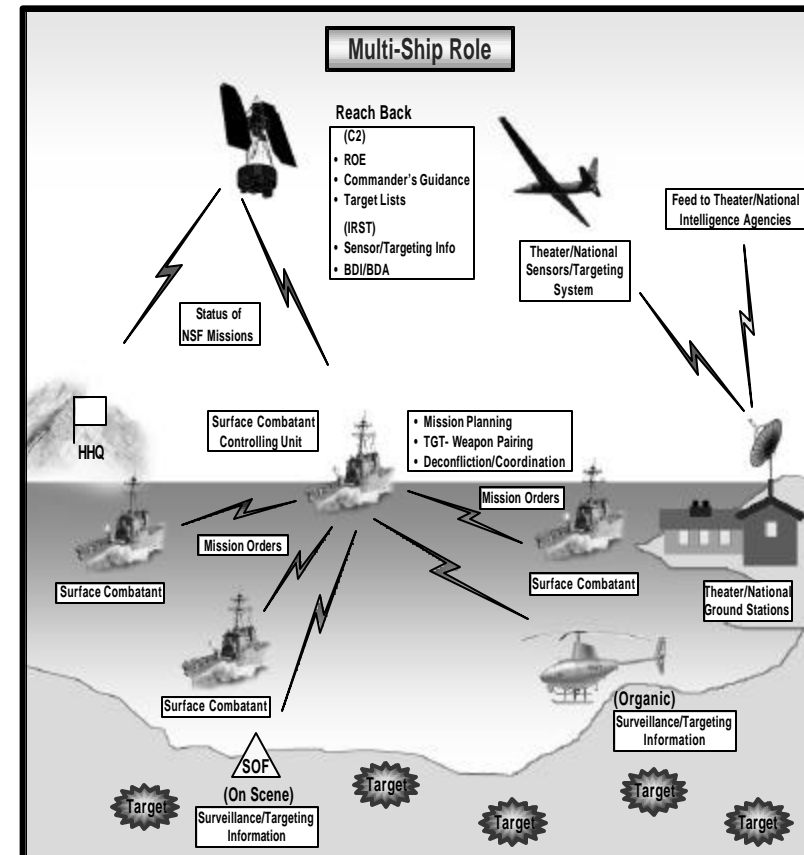
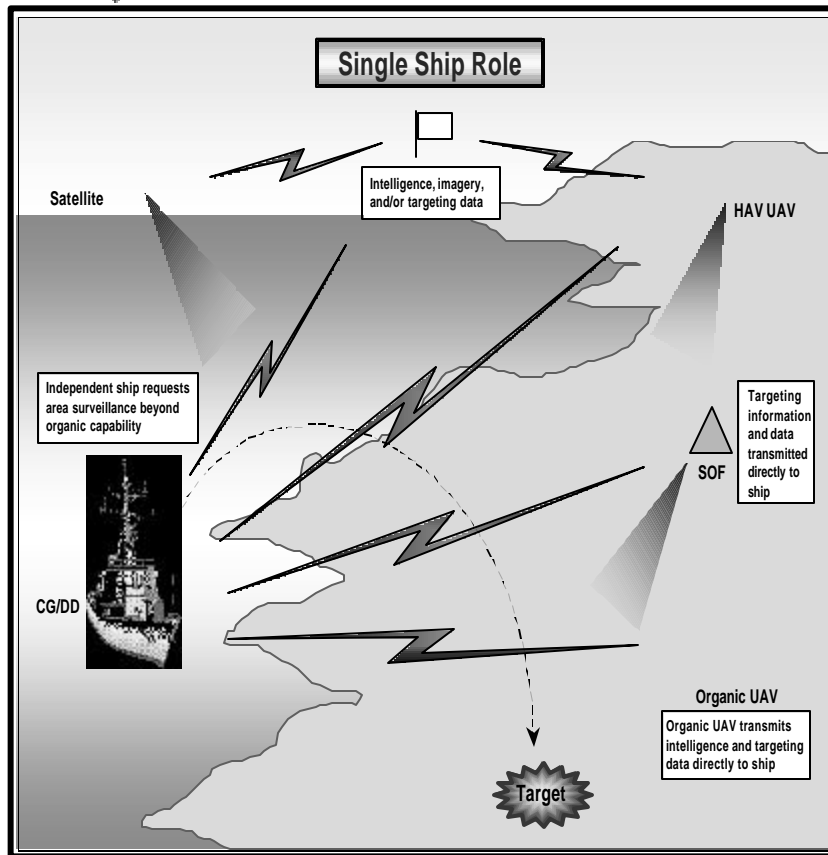
NSFS Roles



Providing Responsive Fires to Ground Forces



NSS Roles



Responsive Fires for the Joint Force Commander



Programmatic Watch List for Land Attack



- Operations & Maintenance (executable but under-funded)
 - Tomahawk program after FMB cuts
 - GWS Overhauls, Night Vision Devices, Conv Ammo
- Procurement
 - 5 inch ERGM PANMC Shortfall in FY04
 - LASM WPN buy
 - AGS Long Range Land Attack Projectile (LRLAP) startup
- Research & Development
 - Tomahawk PTAN & TTPV
 - 5 inch ERGM, remaining technical challenges
 - Advanced Land Attack Missile study results



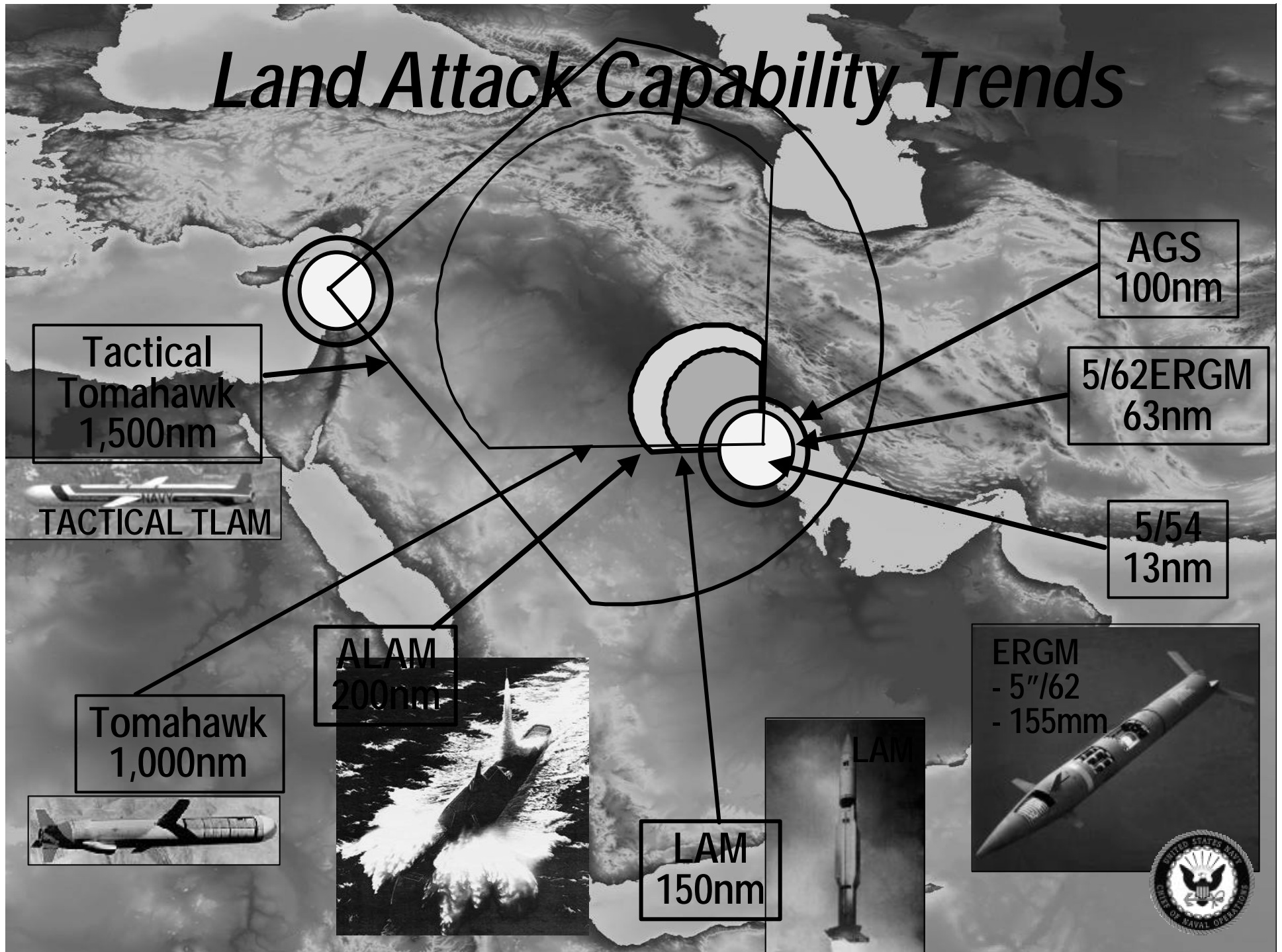
Power Projection Discussion Topics



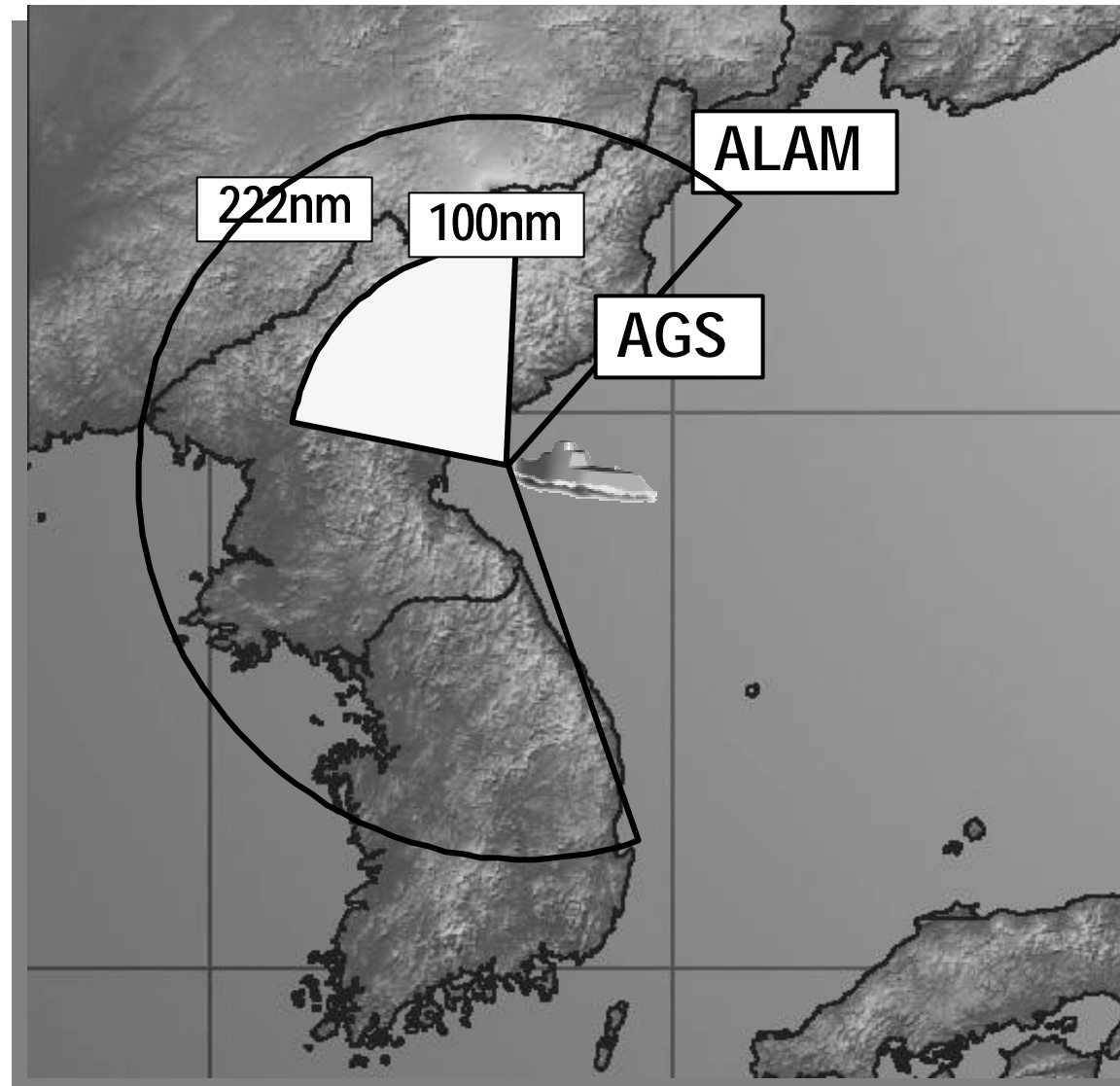
- Land Attack Warfare Commander (Coordinator)
- Targetable Operational Data For All Shooters
- Dynamic Air Space Deconfliction (Joint Solution)
- Common Operational Picture in the Littoral
- Understanding TACAIR and Surface Combatant Weapon and Engagement Capabilities
- Surface Combatants are Multi-Mission Ships
 - Carrier Battle Group Escort
 - Presence and Crisis Response
 - USMC (and US Army) Direct Support (1 Ship per Battalion)



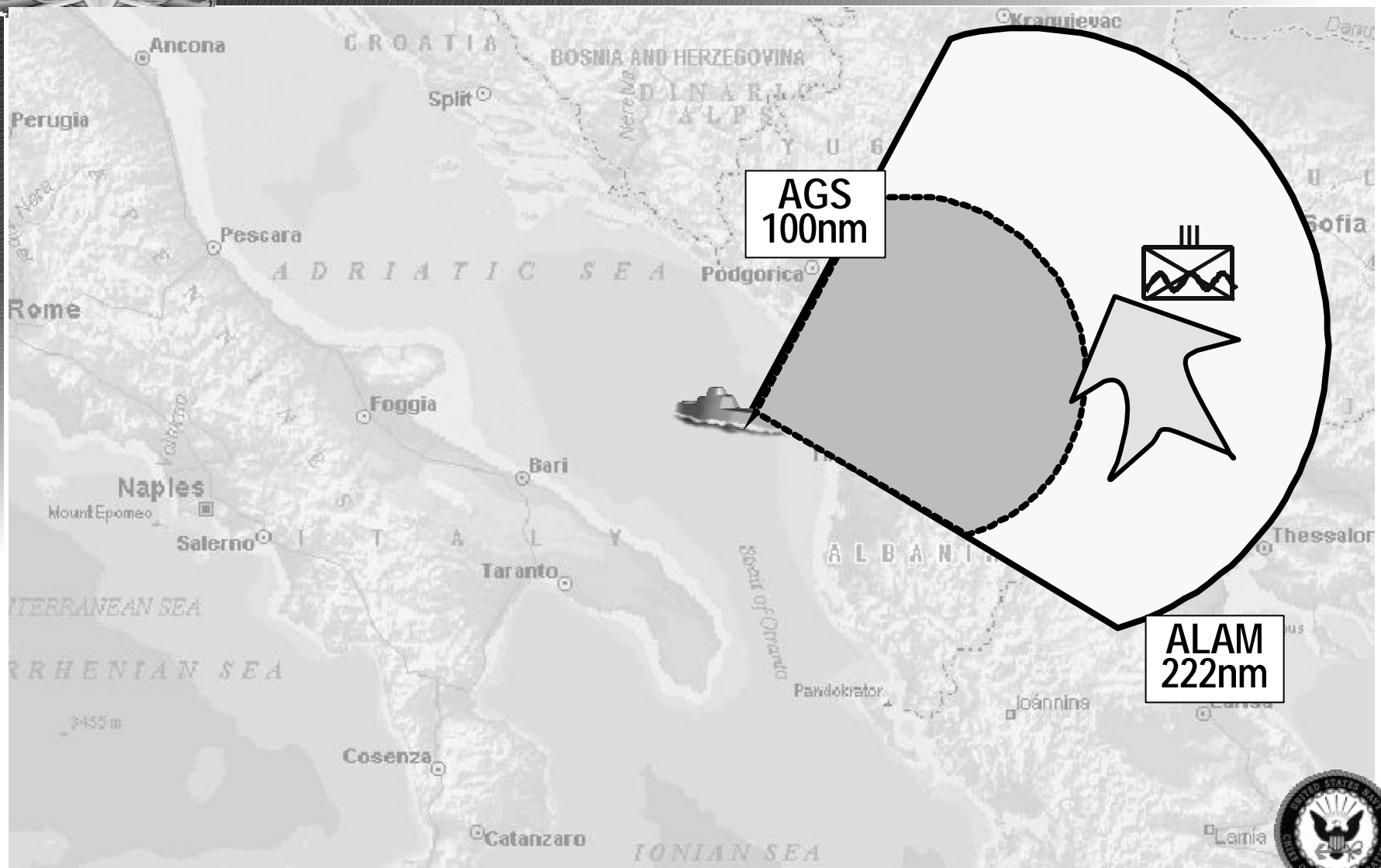
Land Attack Capability Trends



ZUMWALT Class DD 21 Coverage



ZUMWALT Class DD 21 Coverage

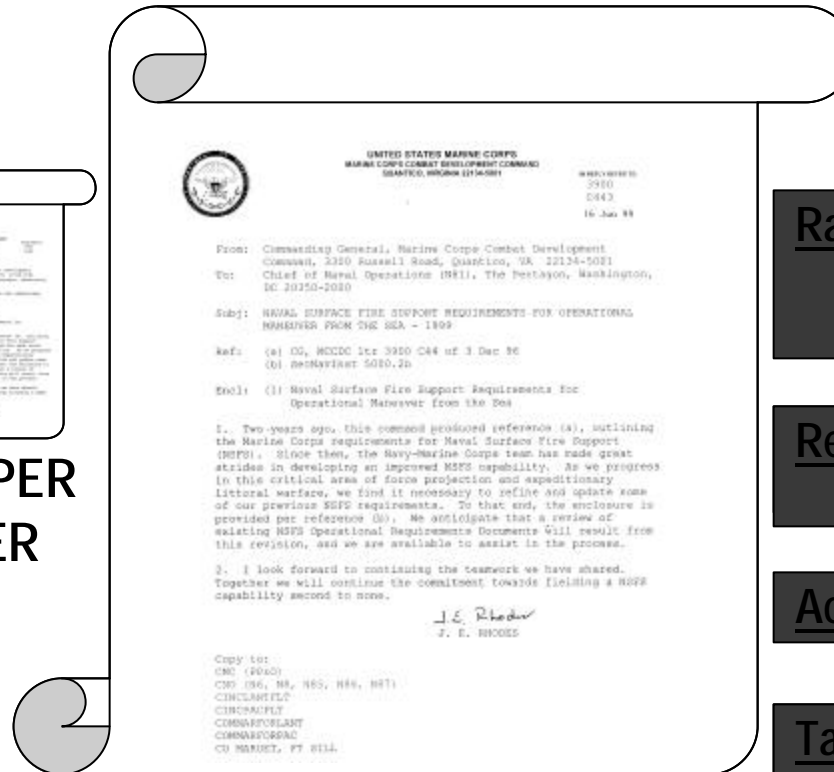
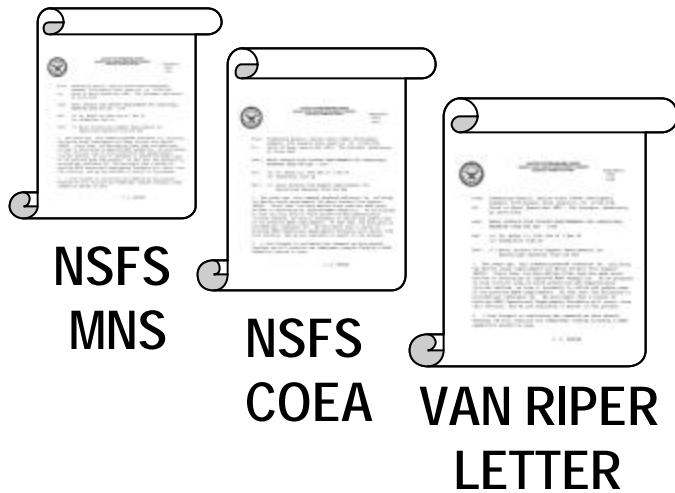




Backups



Naval Fires Requirements



RHODES
LETTER

Range:
Guns 41nm / 63nm
Missiles 200nm / 222nm

Responsiveness: 2.5min
(excluding TOF)

Accuracy: 50m / 20m CEP

Target Acquisition:
50nm / 63nm

Battery Equivalency:
Six Gun Marine 155mm
Artillery Battery-12RPM

1992 1993 1996 1999

Land Attack Defined



- *For the Surface Combatant, Land Attack Warfare encompasses the twin missions of Naval Surface Strike and Naval Surface Fire Support..*

Naval Surface Strike (NSS)

The destruction or neutralization of enemy targets ashore through the use of conventional weapons provided by surface combatants. This includes strategic, operational, or tactical level targets from which the enemy is capable of conducting operations against US or Allied forces.

Naval Surface Fire Support (NSFS)

Fire provided by Navy surface gun, missile, and electronic warfare systems in support of a unit or units tasked with achieving the commander's objectives



Land Attack CONOPS development Process



- Surface Combatant Land Attack CONOPS written under cognizance of Land Attack Capstone Organization
- Workshop held 4-5 October to explore roles and provide detail for CONOPS
- Expect draft for review and signature by N76 and Land Attack Capstone ESC by early next summer



NSFS Tactical Missions for Surface Combatants



- Artillery Units assigned to one of four Tactical Missions (DS, GS, R, GS-R)
- Missions Imply Specific Responsibilities (JP 3-09; Matrix format)
- Revised SC-LA Responsibility Matrix Needed
- Common Understanding Among All Services Required



Land Attack Warfare Commander



- Should be a Single Commander Responsible for Planning and Executing NSS and NSFS Missions
- Composite Warfare Commander (CWC) Construct Needs to Evolve to Take Advantage of New SC-LA Capabilities



Common Operational Picture



- **Battlespace Situational Awareness**
 - Definition of Specific COP Requirements
 - Management of Data
- **Targetable Operational Data for all Users**
- **Dynamic Deconfliction and Passing of Mission Data**
- **Responsibility for COP Needs to be Defined**



Deconfliction



- Procedures/Coordination/Responsibilities
Need Definition
- Need Joint Solution for Dynamic
Deconfliction
 - To include Friendly Air Defense (TBMD and OCMD)
- Traditional Fire Support Coordination
Measures Are Still Valid Procedures



Land Attack SC and TacAir Coordination and Integration



- Unique Engagement Capabilities of TacAir and Surface Combatants
 - Fixed targets vs mobile targets vs stealth
- Needs
 - Common targeting database
 - Situational awareness
 - Command and control
- Hand off of target between systems



Force Protection



- OMFTS = Sea as Maneuver Space
- Surface Combatant Provides Multi-Mission Capability ISO Maneuver Forces
 - AAW, C2, USW, EW, ATC / Terminal Guidance, TBMD



Counter Fire



- Key Issue for Army and Marine Corps
- Rapid Independent Engagement by a SC in < 3 Min
- SC as Sensor, Fusion/Targeting Cell & Shooter
- SC Responsibility to Coordinate & Inform Higher, Lower & Adjacent Nodes

